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RESEARCH ON PESTICIDE RESIDUES IN 1956
AT THE STATE AGRICULTURAL EXPERIMENT STATIONS

March 1957

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Pesticide Residues
in

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Data supplied by
State Agricultural Experiment Stations

Compiled in the
State Experiment Stations Division
Agricultural Research Service
United States Department of Agriculture
Washington, D. C.

FOREWORD

The passage of the Pesticide Chemical Residues Amendment (Public Law 518, often called the Miller Amendment) to the Food, Drug and Cosmetic Act focused attention on the need for additional information on pesticide residues. To make the information available on the pesticide residue research in progress at the State Agricultural Experiment Stations, it was suggested that a list be prepared. To facilitate the assembling of this information, the State Experiment Stations Division, Agricultural Research Service, United States Department of Agriculture sent a form to each State agricultural experiment station asking that they list the pesticide residue research that was active at the station in 1956. The following is a compilation of the information received from the State agricultural experiment stations. The Pesticide Chemical Residues Amendment does not deal directly with pesticide residues in soil. However, pesticide residues in soil may be absorbed by the roots and enter into agricultural commodities in this manner. The close relationship between research on pesticide residues in soils and in agricultural commodities appeared to warrant its inclusion in this listing.

It is hoped that this list will facilitate the exchange of information on pesticide residues, methods of determining them and related subjects pertaining to pesticide residues. Any requests for further information should be directed to the station doing the research.

933263
ANIMAL OR ANIMAL PRODUCTS

Toxicant	Entomologist, Plant Pathologist etc.	Analyst	State
<u>ANIMAL OR PRODUCT NOT SPECIFIED</u>			
Chlorinated Hydrocarbons	G.C. Decker	N. Cannon	Illinois
"	D.P. Furman	W.M. Hoskins	Calif.(Riverside)
"	- -	W.H. Orgell	Iowa
DDT	F.S. Barklow	T.G. Bowery	North Carolina
Dieldrin	"	"	"
Endrin	L.E. Harris	J.C. Stout	Utah
Heptachlor	"	"	"
Organic Phosphates	- -	W.H. Orgell	Iowa
Toxaphene	G.H. Blake	- -	Alabama
Toxicant not indicated	H.C. Fink	D.E.H. Frear	Pennsylvania

ANIMAL TISSUES

BEEF CATTLE

Endrin	- -	L.C. Terriere	Oregon
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CATTLE

Butadiene Furfural Copolymer	D.E. Howell	G.S. Heller	Oklahoma
Malathion	"	"	"

DAIRY CATTLE

Endrin	- -	L.C. Terriere	Oregon
Organic Phosphates	- -	J.E. Cassida	Wisconsin

DOGS

Organic Phosphates	- -	J.E. Cassida	Wisconsin
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POULTRY

BHC	J.S. Roussel	E.A. Epps	Louisiana
Endrin	- -	L.C. Terriere	Oregon
Malathion	J.M. Grayson	J.F. Eheart	Virginia

RATS

Organic Phosphates	- -	J.E. Cassida	Wisconsin
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SWINE

Endrin	- -	L.C. Terriere	Oregon
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EGGS

Endrin	L. E. Harris	J. C. Stout	Utah
Heptachlor	"	"	"
Toxicant not indicated	H. C. Fink	D. E. H. Frear	Pennsylvania

MILK

BHC	C. R. Weaver	--	Ohio
CI-HCl's	G. C. Decker	John Matteson	Illinois
Endrin	L. E. Harris	J. C. Stout	Utah
Heptachlor	"	"	"
Lindane	H. H. Schwardt	D. J. Lisk	N. Y. (Cornell)
Malathion	Ray Hutson	E. J. Benne	Michigan
"	J. M. Grayson	J. F. Eheart	Virginia
Melhoxychlor	B. B. Pepper	S. B. Randle	New Jersey
Toxicant not indicated	H. C. Fink	D. E. H. Frear	Pennsylvania

FIBER CROPS

Toxicant	Entomologist Plant Pathologist etc.	Analyst	State
<u>COTTON</u>			
BHC	J. K. Reed	H. J. Webb	South Carolina
"	N. M. Randolph	USDA -	Texas
		R. D. Chisholm	
Calcium Arsenate	J. S. Roussel	J. W. Torbert	Louisiana
Chlordane	A. D. Telford	J. M. Witt	Arizona
DDT	A. D. Telford	J. M. Witt	Arizona
"	R. M. Randolph	USDA -	Texas
		R. D. Chisholm	
Dieldrin	R. M. Randolph	USDA -	Texas
		R. D. Chisholm	
Endrin	J. K. Reed	H. J. Webb	South Carolina
Guthion(Cotton seed)	W. D. Wylie	--	Arkansas
Parathion	R. M. Randolph	USDA -	Texas
		R. D. Chisholm	
Toxaphene	J. K. Reed	H. J. Webb	South Carolina
"	R. M. Randolph	USDA -	Texas
		R. D. Chisholm	
"	A. D. Telford	J. M. Witt	Arizona

FIELD CROPS

Toxicant	Entomologist Plant Pathologist etc.	Analyst	State
<u>CORN (including sweet corn)</u>			
Aldrin	Stirling Kyd	Shell Chemical Co.	Missouri
"	R.R. Walton	V.G. Heller	Oklahoma
Dalapon	- -	K.P. Buchholtz	Wisconsin
DDT	R.R. Walton	V.G. Heller	Oklahoma
"	J.H. Hawkins	A.S. Getschell	Maine
"	C.H. Brett	T.G. Bowery	North Carolina
"	L.H. Rolston	J.C. Carroll	Ohio
"	M. Semel	D.J. Lisk	New York (Cornell)
"	W.G. Genung	C.H. Van Midelem	Florida
Diazinon	F.P. Harrison	- -	Maryland
"	P.J. Spangler	Giegy Chemical	Missouri
"	W.R. Enns	Giegy Chemical	Missouri
Dieldrin	Stirling Kyd	Shell Chemical Co.	Missouri
"	R.R. Walton	V.G. Heller	Oklahoma
Endrin	Stirling Kyd	Shell Chemical Co.	Missouri
"	R.R. Walton	V.G. Heller	Oklahoma
Parathion	W.G. Genung	C.H. Van Midelem	Florida
Phosdrin	H.E. Brown	Shell Chemical Co.	Missouri
Thimet	L.P. Ditman	- -	Maryland

PEANUTS

Captan	W.E. Cooper	T.G. Bowery	North Carolina
DDT	G.H. Blake	- -	Alabama
Endrin	J.E. Roberts	R.W. Storherr	Georgia
Lindane	G.H. Blake	- -	Alabama
PCP	W.E. Cooper	T.G. Bowery	North Carolina
Thiram	W.E. Cooper	T.G. Bowery	North Carolina

SORGHUM (Grain)

BHC	N. M. Randolph	R. H. Carter	Texas
DDT	N. M. Randolph	R. H. Carter	Texas
Dieldrin	N. M. Randolph	R. H. Carter	Texas
Malathion	J. E. Roberts	R. W. Storherr	Georgia
Parathion	N. M. Randolph	R. H. Carter	Texas
Toxaphene	J. E. Roberts	R. W. Storherr	Georgia
	N. M. Randolph	R. H. Carter	Texas

SOYBEANS

Aldrin	W. E. Buckholder	L. W. Dawsey	Georgia
Calcium Arsenate	J. S. Rousell	J. W. Torbett	Louisiana
Chlordane	W. E. Buckholder	L. W. Dawsey	Georgia
Heptachlor	W. E. Buckholder	L. W. Dawsey	Georgia
Toxaphene	E. W. Beck	L. W. Dawsey	Georgia

SUGAR CANE

Systox	J. S. Rousell	J. B. McDevitt	Louisiana
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TOBACCO

DDT	W. C. Rhoades	C. H. Van Middlelem	Florida
Endrin	F. E. Guthrie	T. G. Bowery	North Carolina
Parathion	W. C. Rhoades	C. H. Van Middlelem	Florida
Rhothane	F. E. Guthrie	T. G. Bowery	North Carolina
Toxaphene	F. E. Guthrie	T. G. Bowery	North Carolina

CROP NOT INDICATED

Chlorinated Hydro- carbon and Organic Phosphates	R. F. Smith O. G. Facon W. W. Middlekauff	W. M. Hoskins W. R. Irwin R. Migkus	California - (Berkeley) - -
Toxicant not indicated	H. T. Reynolds R. L. Metcalf	F. A. Gunther I. R. Fukuto	California - (Riverside)

FORAGE

Toxicant	Entomologist Plant Pathologist etc.	Analyst	State
<u>ALFALFA</u>			
Aldrin	R. J. Quinton D. M. Tuttle Stirling Kyd	Shell Chemical J. M. Witt Shell Chemical	Connecticut Arizona Missouri
BHC	C. R. Weaver H. C. Fink	-- D. E. H. Frear	Ohio Pennsylvania
CIFC (Analytical Methods)	M. Schreiber	D. J. Lisk	N.Y.(Cornell)
Diazinon	L. B. Daniels R. J. Quinton	-- Giegy Chemical	Colorado Connecticut
Dieldrin	R. J. Quinton Stirling Kyd B. B. Pepper J. R. Dogger	Shell Chemical Shell Chemical S. B. Randle T. G. Bowery	Connecticut Missouri New Jersey North Carolina
Endrin	R. J. Quinton Stirling Kyd G. A. Bieberdorf	Shell Chemical Shell Chemical V. G. Heller	Connecticut Missouri Oklahoma
Heptachlor	J. R. Dogger	T. G. Bowery	North Carolina
Malathion	J. E. Roberts J. R. Dogger	R. W. Storherr T. G. Bowery	Georgia North Carolina
Methyl Parathion	Stirling Kyd	Monsanto Chemical	Missouri
Parathion	G. A. Bieberdorf	V. G. Heller	Oklahoma
R-1303	R. J. Quinton	Stauffer Chemical	Connecticut
Systox	G. A. Bieberdorf	Chemagro Chemical	Oklahoma
Toxaphene	G. A. Bieberdorf H. C. Fink	V. G. Heller D. E. H. Frear	Oklahoma Pennsylvania

CLOVER

Aldrin	G. G. Gyrisco	D. J. Lisk	N.Y.(Cornell)
Diazinon	"	"	"
Dieldrin	"	"	"
Endrin	"	"	"
Heptachlor	H.C. Fink	D. E. H. Frear	Pennsylvania
	G. G. Gyrisco	D. J. Lisk	N.Y.(Cornell)
Lindane	"	"	"
Strobane	"	"	"
Systox	L. C. Kuitert	C. H. Van Middlelem	Florida

BERMUDA GRASS

Aldrin	E. W. Beck	L. H. Dawsey	Georgia
Chlordane	"	"	"
Heptachlor	"	"	"
Toxaphene	"	"	"

PASTURE GRASS

Calcium Arsenate	J. S. Roussel	J. W. Torbert	Louisiana
Heptachlor	J. R. Dogger	T. G. Bowery	North Carolina
Malathion	W. G. Genung	C. H. Van Middlelem	Florida
Parathion	E. G. Kelsheimer	"	"
	W. G. Genung	"	"

PEANUT HAY

DDT	W. C. Rhoades	C. H. Van Middlelem	Florida
	J. R. Dogger	T. G. Bowery	North Carolina
Endrin	"	"	"
Parathion	W. C. Rhoades	C.H. Van Middlelem	Florida
Toxaphene	J. R. Dogger	T. G. Bowery	North Carolina

SOYBEAN FORAGE

Dieldrin	J. R. Dogger	T. G. Bowery	North Carolina
Toxaphene	"	"	"

BIRDSFOOT TREFOIL

Dalapon	M. Schreiber	D. J. Lisk	N.Y.(Cornell)
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MIXED FORAGE

Aldrin	G. G. Gyrisco	D. J. Lisk	N.Y.(Cornell)
D. D. T.	"	"	"
Heptachlor	"	"	"
Malathion	"	"	"
Methoxychlor	"	"	"
Parathion	"	"	"

CROP NOT INDICATED

Dintros (Analytical Methods)	M. Schreiber	D.J. Lisk	N.Y.(Cornell)
DNOSEBP	"	"	"
Chlorinated Hydrocarbons	G. C. Decker	N. Gannon	Illinois
Mixtures	T. W. Kerr	C. Olney	Rhode Island
PCWB	D. A. Roberts	D. J. Lisk	N.Y.(Cornell)
Organic Phosphates	- -	C. C. Roan	Kansas
Toxicant not indicated	T. A. Brinkley	J. E. Fahey (USDA)	Iowa
"	G. C. Degler	John Matteson	Illinois
	Norman Gannon	John Merboth	Illinois

GRAINS

Toxicant	Entomologist Plant Pathologist etc.	Analyst	State
<u>BARLEY</u>			
Toxaphene	P. G. Stone	Hercules Powder Co.	Missouri
<u>OATS</u>			
D. D. T.	N. M. Randolph	R. H. Carter	Texas
Dieldrin	"	"	"
Toxaphene	Stirling Kyd	Hercules Powder Co.	Missouri
<u>SMALL GRAINS</u>			
Malathion	D. E. Howell	V. G. Heller	Oklahoma
Parathion	"	"	"
<u>WHEAT</u>			
Endrin	R. E. Pfadt	Shell Chemical Co.	Wyoming
Iso Systox	H. E. Brown	Chemagro Chemical Crop.	Missouri
Thimet	H. E. Brown	American Cyanimid	Missouri
Toxaphene	Stirling Kyd	Hercules Powder Co.	Missouri
	J. A. Callenback	"	North Dakota
<u>STORED GRAINS</u>			
Chlorinated Hydrocarbons	A. E. Michelbacher	W. M. Hoskins	California
<u>TOXICANTS NOT INDICATED</u>			
	D. L. Lindgren	F. A. Gunther	Calif. (Riverside)
	R. G. Strong	"	"

SMALL FRUIT

Toxicant	Entomologist Plant Pathologist etc.	Analyst	State
<u>BLACKBERRIES</u>			
Malathion	G. H. Blake	--	Alabama
Parathion	"	--	"
<u>BLUEBERRIES</u>			
Dieldrin	B. B. Pepper	S. B. Randle	New Jersey
Malathion	"	"	" "
<u>CRANBERRIES</u>			
3 Amino 1,2,4 Triazole	R. J. Aldrich	S. B. Randle	New Jersey
Captan	E. W. Anthon	R. R. Regault	Washington
Perthane	Charles Doughty	R. R. Regault	Washington
<u>GRAPES</u>			
Captan	J. A. Cox	H. F. Enos	Pennsylvania
Carbamates	"	"	"
DDT	W. R. Enns	E. E. Pickett	Missouri
Diazinon	W. R. Enns	Giegy Chemical	"
Dieldrin	"	Shell Chemical	"
Glyodin	J. A. Cox	H. F. Enos	Pennsylvania
Parathion	W. R. Enns	S. E. Pickett	Missouri
General	E. F. Taschenberg	A. W. Avens	N. Y. (Geneva)
<u>RASPBERRIES</u>			
Fungicides	--	L. C. Terriere	Oregon

STRAWBERRIES

Aramite	W. R. Enns	U. S. Rubber Co.	Missouri
Captan	B. J. Davis	S. B. Randle	New Jersey
Carbamates	"	"	"
Chlordane	E. G. Kelsheimer	C. H. Van Middlelem	Florida
Chorothion	"	"	"
Dipterex	"	"	"
IPC	--	V. H. Freed	Oregon
Malathion	R. E. Waites E. G. Kelsheimer	C. H. Van Middlelem	Florida "
Parathion	R. E. Waites E. G. Kelsheimer W. R. Enns --	" " E. E. Pickett L. C. Terriere	" " Missouri Oregon
Systox	R. E. Waites	C. H. Van Middlelem	Florida
Fungicides	--	L. C. Terriere	Oregon

CROP NOT INDICATED

Aramite	L. M. Smith W. W. Allen	W. M. Hoskins Calif. (Berkeley) W. R. Erwin R. Miskus	" "
Chlorinated Hydrocarbons	"	"	"
Chlorinated Sulfates	"	"	"
Cl Sulfonates	"	"	"
Cl Sulfides	"	"	"
Organic Phosphates	"	"	"

TREE FRUITS

Toxicant	Entomologist, Plant Pathologist etc.	Analyst	State
APPLES			
Aramite	- -	L. C. Terriere	Oregon
"	W. J. O'Neill	R. R. Regault	Washington
Captan	Philip Garman	L. G. Kierstead	Connecticut
"	C. F. Smith	T. G. Bowery	North Carolina
"	Dean Asquith	D. E. H. Frear	Pennsylvania
"	A. B. Burrill	D. J. Lisk	N. Y. (Cornell)
"	W. J. O'Neill	R. R. Regault	Washington
"	- -	L. C. Terriere	Oregon
Carbamates	- -	L. C. Terriere	Oregon
	Dean Asquith	D. E. H. Frear	Pennsylvania
	A. B. Burrill	D. J. Lisk	N. Y. (Cornell)
DDT	G. A. Bieberdorf	V. C. Heller	Oklahoma
"	- -	L. C. Terriere	Oregon
"	- -	D. J. Lisk	N. Y. (Cornell)
"	J. E. Dewey	- -	"
Diazinon	W. R. Enns	Giegy Chemical	Missouri
"	W. J. O'Neill	R. R. Regault	Washington
Dimite	"	"	"
Dipterex	W. R. Enns	Chemagro Chemical	Missouri
"	C. R. Cartwright	J. C. Carroll	Ohio
EPN	Philip Garman	L. G. Kierstead	Connecticut
Glyodin	Dean Asquith	D. E. H. Frear	Pennsylvania
"	A. B. Burrill	D. J. Lisk	N. Y. (Cornell)
Heptachlor	W. R. Enns	Velsicol Corp.	Missouri
Karathane	A. B. Burrill	D. J. Lisk	N. Y. (Cornell)
"	W. J. O'Neill	R. R. Regault	Washington
Kelthane	- -	L. C. Terriere	Oregon
	W. J. O'Neill	R. R. Regault	Washington
Lead Arsenate	Philip Garman	L. G. Kierstead	Connecticut
Malathion	C. F. Smith	T. G. Bowery	North Carolina
"	J. M. Dewey	- -	N. Y. (Cornell)
Maneb	Roderick Sprague	R. R. Regault	Washington
Methoxychlor	Philip Garman	L. G. Kierstead	Connecticut
"	C. F. Smith	T. G. Bowery	North Carolina
"	- -	D. J. Lisk	N. Y. (Cornell)
Ovex	- -	L. C. Terriere	Oregon
"	J. M. Dewey	- -	N. Y. (Cornell)
Parathion	L. B. Daniels	- -	Colorado
"	Philip Garman	L. G. Kierstead	Connecticut
"	C. F. Smith	T. G. Bowery	North Carolina
"	J. M. Dewey	- -	N. Y. (Cornell)
"	G. A. Bieberdorf	V. G. Heller	Oklahoma

Phenyl Mercury Acetate	A. B. Burrill	D. J. Lisk	N. Y. (Cornell)
Phenyl Mercury Lactate	"	"	"
Quinex	"	"	"
B6199	W. R. Enns	Chipman Chemical	Missouri
Sulfonone	W. J. O'Neill	R. R. Regault	Washington
Sulphur(Mag 70)	A. B. Burrill	D. J. Lisk	N. Y. (Cornell)
Systemic Phosphates	B. B. Pepper	S. B. Randle	New Jersey
Vancide M	A. B. Burrill	D. J. Lisk	N. Y. (Cornell)
Ziram	Roderick Sprague	R. R. Regault	Washington
Miscellaneous	- -	A. W. Avens	N. Y. (Geneva)

AVACADOS

Systox	D. O. Wolfenbarger	C. H. Van Middelen	Florida
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CHERRIES

Aramite	E. W. Anthon	R. R. Regault	Washington
Captan	J. A. Cox	D. E. H. Frear	Pennsylvania
Carbamates	"	"	"
Chlorobenzilate	E. W. Anthon	R. R. Regault	Washington
Diazinone	W. R. Enns	Giegy Chemical	Missouri
Dieldrin	G. A. Bieberdorf	V. G. Heller	Oklahoma
Glyodin	J. A. Cox	D. E. H. Frear	Pennsylvania
Karathane	E. W. Anthon	R. R. Regault	Washington
Kelthane	"	"	"
Parathion	M. E. Perez	J. A. Bonnett	Puerto Rico
Perthane	- -	L. C. Terriere	Oregon
Sulfonone	E. W. Anthon	R. R. Regault	Washington
Fungicide (general)	- -	L. C. Terriere	Oregon
Insecticides(General)	S. E. Lienk	A. W. Avens	N. Y. (Geneva)

CITRUS

Diethrin	D. M. Tuttle	J. M. Witt	Arizona
DNOCHP	R. B. Johnson	J. J. McBride (L.A.)	Florida
Endrin	D. M. Tuttle	J. M. Witt	Arizona
Malathion	W. L. Thompson &	J. J. McBride (L.A.)	Florida
Ovex	R. B. Johnson	"	"
Parathion	W. L. Thompson	J. J. McBride	Florida
	D. M. Tuttle	J. M. Witt	Arizona
Sulphenone	R. B. Johnson	J. J. McBride (L.A.)	Florida
Sulphur	"	"	"
Systox (Juice)	"	"	"
Miscellaneous	R. E. Metcalf	F. A. Gunther	Calif. (Riverside)
	G. E. Carman	"	"
G "	L. R. Jeppson	"	"
	W. H. Ewart	"	"

LIMES

Systox	D. O. Wolfenbarger	C. H. Van Middeltem	Florida
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PEACHES

Aramite	E. W. Anthon	R. R. Regault	Washington
Captan	Philip Garman	L. G. Kierstead	Connecticut
"	B. J. Davis	S. B. Randle	New Jersey
"	Dean Asquith	D. E. H. Frear	Pennsylvania
"	E. W. Anthon	R. R. Regault	Washington
Carbamates	Philip Garman	L. G. Kierstead	Connecticut
"	B. J. Davis	S. B. Randle	New Jersey
"	Dean Asquith	D. E. H. Frear	Pennsylvania
"	F. B. Strubble	E. I. duPont de Nemours Co.	Oklahoma
Chlorobenzilate	E. W. Anthon	R. R. Regault	Washington
Diazinon	W. R. Enns	Giegy Chemical	Missouri
"	E. W. Anthon	R. R. Regault	Washington

Dichlone	Philip Garman	L. G. Kierstead	Connecticut
Dieldrin	"	"	"
"	C. F. Smith	T. G. Bower	North Carolina
"	G. A. Bieberdorf	V. G. Heller	Oklahoma
Dimite	E. W. Anthon	R. R. Regault	Washington
Dipterex	R. W. Rings	J. C. Carroll	Ohio
EPN	Philip Garman	L. G. Kierstead	Connecticut
Fungicides(General)	- -	L. C. Tierriere	Oregon
Glyodin	Dean Asquith	D. E. H. Frear	Pennsylvania
Hercules 528	C. F. Smith	T. G. Bowery	North Carolina
Insecticides (General)	S. E. Lienk	A. W. Avens	N. Y. (Geneva)
Kelthane	E. W. Anthon	R. R. Regault	Washington
Malathion	W. D. Wylie	- -	Arkansas
"	L. B. Daniels	- -	Colorado
Maneb	Roderick Sprague	R. R. Regault	Washington
Parathion	W. D. Wylie	- -	Arkansas
"	Philip Garman	L. G. Kierstead	Connecticut
"	C. F. Smith	T. G. Bowery	North Carolina
Sulfonone	E. W. Anthon	R. R. Regault	Washington

PEARS

Aramite	- -	L. C. Terriere	Oregon
	W. J. O'Neill	R. R. Regault	Washington
Chlorobenzilate	"	"	"
DDT	- -	L. C. Terriere	Oregon
Diazinon	W. J. O'Neill	R. R. Regault	Washington
Dimite	"	"	"
Karathane	"	"	"
Kelthane	- -	L. C. Terriere	Oregon
	W. J. O'Neill	R. R. Regault	Washington

Fungicides(General)	- -	L. C. Tierriere	Oregon
Glyodin	Dean Asquith	D. E. H. Frear	Pennsylvania
Hercules 528	C. F. Smith	T. G. Bowery	North Carolina
Insecticides (General)	S. E. Lienk	A. W. Avens	N. Y. (Geneva)
Kelthane	E. W. Anthon	R. R. Regault	Washington
Malathion	W. D. Wylie	- -	Arkansas
"	L. B. Daniels	- -	Colorado
Maneb	Roderick Sprague	R. R. Regault	Washington
Parathion	W. D. Wylie	- -	Arkansas
"	Philip Garman	L. G. Kierstead	Connecticut
"	C. F. Smith	T. G. Bowery	North Carolina
Sulfonone	E. W. Anthon	R. R. Regault	Washington

PEARS

Aramite	- -	L. C. Terriere	Oregon
"	W. J. O'Neill	R. R. Regault	Washington
Chlorobenzilate	W. J. O'Neill	R. R. Regault	Washington
DDT	- -	L. C. Terriere	Oregon
Diazinon	W. J. O'Neill	R. R. Regault	Washington
Dimite	"	"	"
Karathane	"	"	"
Kelthane	- -	L. C. Terriere	Oregon
Mitox	W. J. O'Neill	R. R. Regault	Washington
Sulfonone	"	"	"
Ziram	- -	L. C. Terriere	Oregon

Mitox	W. J. O'Neill	R. R. Regault	Washington
Sulfonone	"	"	"
Ziram	- -	L. C. Terriere	Oregon
<u>PECANS</u>			
DDT	G. A. Bieberdorf	V. G. Heller	Oklahoma
<u>PLUMS</u>			
Aramite	E. W. Anthon	R. R. Regault	Washington
Chlorobenzilate	E. W. Anthon	R. R. Regault	Washington
Diazinon	W. R. Enns	Giegy Chemical	Missouri
Kelthane	E. W. Anthon	R. R. Regault	Washington
Sulfonone	"	"	"
<u>PRUNES</u>			
General	S. E. Lienk	A. W. Avens	N. Y. (Geneva)
<u>GENERAL</u>			
Aramite	E. M. Stafford	W. R. Erwin	Calif.(Berkeley)
Chlorinated Hydrocarbons	H. F. Madsen	W. M. Hoskiss	Calif.(Berkeley)
Chlorinated sulfates	F. M. Summers	R. Miskus	Calif. (Davis)
Cl-sulfides	"	"	"
Cl-sulfonate	"	"	"
Organic Phosphates	H. F. Madsen	W. M. Hoskiss	Calif.(Berkeley)
Toxicants not indicated	M. M. Barnes R. L. Metcalf J. C. Ortega	F. A. Gunther T. Fukuto - -	Calif. (R.) " "
"	G. C. Decker	John Matteson	Illinois
"	Norman Gannon	John Merboth	"
Miscellaneous	--	--	Iowa

VEGETABLES

Toxicant	Entomologist Plant Pathologist etc.	Analyst	State
<u>ASPARAGUS</u>			
Malathion	L.P. Ditman		Maryland
2-4D	- -	V.H. Freed	Oregon
<u>BEANS</u>			
Chlordane	R.E. Waites	C.H. Van Middeltem	Florida
Chlorate-borate	R.D. Sweet	D.J. Lisk	New York (Cornell)
DDT	R.E. Waites	C.H. Van Middeltem	Florida
"	L.P. Ditman	- -	Maryland
" (foliage	C.H. Brett	T.G. Bowery	North Carolina
" deposit)	J.L. Brann	- -	New York (Cornell)
Diazinon	- -	L.C. Terriere	Oregon
Dieldrin	J.B. Sleesman	J.C. Carroll	Ohio
"Dilan	C.H. Brett	T.G. Bowery	North Carolina
Dipterex	J.P. Sleesman	J.C. Carroll	Ohio
Endrin	C.H. Brett	T.G. Bowery	North Carolina
Malathion	G.H. Blake	- -	Alabama
"	R.E. Waites	C.H. Van Middeltem	Florida
"	C.H. Brett	T.G. Bowery	North Carolina
"	R.R. Walton	V.G. Heller	Oklahoma
Methoxychlor	C.H. Brett	T.G. Bowery	North Carolina
Parathion	R.E. Waites	C.H. Van Middeltem	Florida
"	R.R. Walton	V.G. Heller	Oklahoma
Systox	R.E. Waites	C.H. Van Middeltem	Florida
"	R.R. Walton	V.G. Heller	Oklahoma

Toxaphene	G.H. Blake	- -	Alabama
"	R.E. Waites	C.H. Van Middeltem	Florida
"	C.H. Brett	T.G. Bowery	North Carolina
Fungicides	- -	L.C. Terriere	Oregon
Fungicides (general)	J.H. Hamilton	A.W. Avens	New York (Geneva)
Insecticides(general)	- -	A.W. Avens	New York (Geneva)

BEETS

General	G.E.R. Hervey	A.W. Avens	New York (Geneva)
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BROCCOLI

Chlordane	R.E. Waites	C.H. Van Middeltem	Florida
Chlorothion	E.G. Kelsheimer	C.H. Van Middeltem	Florida
DDT	L.P. Ditman	- -	Maryland
Diazinon	L.P. Ditman	- -	Maryland
Endrin	"	- -	"
"	M.Semel	D.J. Lisk	New York (Cornell)
Malathion	L.P. Ditman	- -	Maryland
Parathion	M. Semel	D.J. Lisk	New York (Cornell)
"	E.G. Kelsheimer	C.H. Van Middeltem	Florida
Rhothane	Paul Eide	R.R. Regault	Washington
Systox	E.G. Kelsheimer	C.H. Van Middeltem	Florida
Thimet	L.P. Ditman	- -	Maryland
Toxaphene	"	- -	"

CABBAGE

DDT	J.W. Wilson	C.H. Van Middeltem	Florida
"	E.G. Kelsheimer	C.H. Van Middeltem	Florida
"	W.G. Genung	"	"
"	D.M. Norris	"	"
Diazinon	J.W. Wilson	"	"
"	D.M. Norris	"	"
Endrin	M. Semel	D.J. Lisk	New York (Cornell)

Malathion	J.W. Wilson	C.H. Van Middlelem	Florida
"	D.M. Norris	"	"
"	C.H. Brett	T.G. Bowery	North Carolina
Parathion	J.W. Wilson	C.H. Van Middlelem	Florida
"	W.G. Genung	"	"
"	D.M. Norris	"	"
"	M. Semel	D.J. Lisk	New York (Cornell)
Systox	J.W. Wilson	C.H. Van Middlelem	Florida
"	E.G. Kelsheimer	"	"
Toxaphene	J.W. Wilson	"	"

CARROTS

Aldrin	B.B. Pepper	S.B. Randle	New Jersey
"	Angus Howitt	R.R. Regault	Washington
Chlordane	B.B. Pepper	S.B. Randle	New Jersey
"	Angus Howitt	R.R. Regault	Washington
DDT	B.B. Pepper	S.B. Randle	New Jersey
Diethrin	"	"	"
"	Angus Howitt	R.R. Regault	Washington
Endrin	B.B. Pepper	S.B. Randle	New Jersey
Heptachlor	B.B. Pepper	S.B. Randle	New Jersey
"	J.M. Dewey	M.H.J. Weiden	New York (Cornell)
"	Angus Howitt	R.R. Regault	Washington
Lindane	B.B. Pepper	S.B. Randle	New Jersey
Nemagon	"	"	"
Rhothane	"	"	"
Toxaphene	"	"	"
Fungicides	----	L.C. Terriere	Oregon

CAULIFLOWER

Chlorothion	E.G. Kelsheimer	C.H. Van Middlelem	Florida
Endrin	M. Semel	D.J. Lisk	New York (Cornell)
Parathion	"	"	"
"	E.G. Kelsheimer	C.H. Van Middlelem	Florida
Rhothane	Paul Eide	R.R. Regault	Washington
Systox	E.G. Kelsheimer	C.H. Van Middlelem	Florida

CELEERY

DDT	J.W. Wilson	C.H. Van Middeltem	Florida
Ferbam	J.F. Darby	"	"
Malathion	J.W. Wilson	C.H. Van Middeltem	Florida
Parathion	"	"	"
Systox	"	"	"
Toxaphene	"	"	"
Zineb	J.F. Darby	C.H. Van Middeltem	"
Ziram	"	"	"

COLLARDS

DDT	C.H. Brett	T.G. Bowery	North Carolina
Endrin	"	"	"
Malathion	"	"	"
Methoxychlor	"	"	"
Lindane	"	"	"
Toxaphene	"	"	"

CUCUMBERS

Captan	W.E. Cooper	T.G. Bowery	North Carolina
Dipterex	J.P. Slesman	J.C. Carroll	Ohio
Lindand	W.R. Enns	C.H. Gehrke	Missouri

EGG PLANT

Dieldrin	J.P. Slesman	- -	Ohio
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ENDIVE

DDT	E.G. Kelsheimer	C.H. Van Middeltem	Florida
Systox	"	"	"

ESCAROLE

Chlorothion	E.D. Harris	C.H. Van Middeltem	Florida
Parathion	W.G. Genung	"	"
Toxaphene	R.E. Waites	"	"

LETTUCE

AC 528	P.D. Gerhardt	J.M. Witt	Arizona
Chlordane	R.E. Waites	C.H. Van Midelem	Florida
Chlorothion	E.G. Kelsheimer	C.H. Van Midelem	Florida
"	C.D. Harris	C.H. Van Midelem	Florida
CIPC	R.D. Sweet	D.J. Lisk	New York (Cornell)
DDT	R.E. Waites	C.H. Van Midelem	Florida
"	J.H. Hawkins	A.S. Getchell	Maine
Maneb	R.S. Cox	C.H. Van Midelem	Florida
Parathion	W.G. Genung	"	"
Systox	R.E. Waites	"	"
"	P.D. Gerhardt	J.M. Witt	Arizona
Thimet	R.E. Waites	C.H. Van Midelem	Florida
"	P.D. Gerhardt	J.M. Witt	Arizona
Zineb	R.S. Cox	C.H. Van Midelem	Florida

MELONS

Alanap	R.D. Sweet	D.J. Lisk	New York (Cornell)
Phosdrin	P.D. Gerhardt	J.M. Witt	Arizona

MUSTARD GREENS

Chlorothion	R.E. Waites	C.H. Van Midelem	Florida
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OKRA

Parathion	R.E. Waites	C.H. Van Midelem	Florida
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ONIONS

Endrin	Angus Howitt	R.R. Regault	Washington
Penta "10"	R.D. Sweet	D.J. Lisk	New York (Cornell)
Fungicides	- -	L.C. Terriere	Oregon

PEAS

Toxaphene	R.E. Waites	C.H. Van Middeltem	Florida
General	G.E.R. Hervey	A. W. Avens	New York (Cornell)

PIMIENTOS

Malathion	J.E. Roberts	R.W. Storherr	Georgia
Toxaphene	"	"	"

POTATOES;

Arsenite	R.D. Sweet	D.J. Lisk	New York (Cornell)
Chlordane	D.M. Norris	C.H. Van Middeltem	Florida
DCB-60	F.B. Struble.	- -	Oklahoma
DDT	J.S. Roussel	H.C. Austin	Louisiana
"	G.W. Simpson	A.S. Getchell	Maine
Methoxychlor	J.S. Roussel	F.L. Bonner	Louisiana
Mylone	F.B. Struble.	Carbon & Carbide Chemical	Oklahoma
Systox	D.M. Norris	C.H. Van Middeltem	Florida
"	J.S. Roussel	J.B. McDevitt	Louisiana
Toxaphene	G.W. Simpson	A.S. Getchell	Maine
VC13	F.B. Struble.	Virginia-Carolina Chemical	Oklahoma
Fungicides	- -	L.C. Terriere	Oregon

RADISHES

Parathion	E.G. Kelsheimer	C.H. Van Middeltem	Florida
Systox	"	"	"

SPINACH AND BEET TOPS

Aldrin	L.P. Ditman	- -	Maryland
Captan	F.B. Struble	Cal. Spray and Chemical	Oklahoma

CIPC	R.D. Sweet	D.J. Lisk	New York (Cornell)
Diazinon	R.J. Quinton	Giegy Chemical	Connecticut
Diethrin	L.P. Ditman	- -	Maryland
Dipterex	R.J. Quinton	Chemagro Chemical	Connecticut
Endrin	B.B. Pepper	S.B. Randle	New Jersey
Guthion	R.J. Quinton	Chemagro Chemical	Connecticut
Heptachlor	R.J. Quinton	L.G. Kierstead	Connecticut
"	L.P. Ditman	- -	Maryland
Malathion	G.A. Bieberdorf	V.G. Heller	Oklahoma
Parathion	B.B. Pepper	S.B. Randle	New Jersey
"	G.A. Bierberdorf	V.G. Heller	Oklahoma
R-1303	R.J. Quinton	Stauffer Chemical	Connecticut
Systox	G.A. Bieberdorf	V.G. Heller	Oklahoma
Toxaphene	L.P. Ditman	- -	Maryland
Zineb	F.B. Struble	Rohm & Haas	Oklahoma
General	- -	A.W. Avens	New York (Geneva)

SQUASH

Aldrin	- -	L.C. Terriere	Oregon
DCB-60	F.B. Struble	- -	Oklahoma
Mylone	F.B. Struble	Carbide & Carbon Chemical	Oklahoma
Systox	R.E. Waites	C.H. Van Midelem	Florida
VC-13	F.B. Struble	Virginia Carolina Chemical	Oklahoma

TOMATOES

AC528	P.D. Gerhardt	J.M. Witt	Arizona
DDT	L.B. Daniels	- -	Colorado
"	C.H. Brett	T.G. Bowery	North Carolina
"	D.O. Wolfenbarger	C.H. Van Midelem	Florida
Diazinon	W.E. Bickley	- -	Maryland
"	B.B. Pepper	S.B. Randle	New Jersey

Dilan	D.O. Wolfenbarger	C.H. Van Middeltem	Florida
Dipterex	J.P. Sleesman	J.C. Carroll	Ohio
Endrin	C.H. Brett	T.G. Bowery	North Carolina
EPN	D.O. Wolfenbarger	C.H. Van Middeltem	Florida
Lindane	C.H. Brett	T.G. Bowery	North Carolina
Malathion	D.O. Wolfenbarger	C.H. Van Middeltem	Florida
"	L.P. Ditman	- -	Maryland
"	B.B. Pepper	S.B. Randle	New Jersey
"	C.H. Brett	T.G. Bowery	North Carolina
Methoxychlor	C.H. Brett	T.G. Bowery	North Carolina
Parathion	R.E. Waites	C.H. Van Middeltem	Florida
"	D.O. Wolfenbarger	"	"
Systox	P.D. Gerhardt	J.M. Witt	Arizona
"	R.E. Waites	C.H. Van Middeltem	Florida
Thimet	P.D. Gerhardt	J.M. Witt	Arizona
Toxaphene	R.E. Waites	C.H. Van Middeltem	Florida
"	C.H. Brett	T.G. Bowery	North Carolina
General	- -	A.W. Avens	New York (Geneva)

TURNIP GREENS

Isolan	R.E. Waites	C.H. Van Middeltem	Florida
Parathion	"	"	"
Pyrazoxon	"	"	"
Malathion	"	"	"
Systox	"	"	"

CROP NOT INDICATED

Chlorinated Hydrocarbons and Organic Phosphates		W.H. Orgell	Iowa
"	W.H. Lange	W.M. Hoskins	Calif. (Berkeley)
	E.C. Carlson	W.R. Erwin	
	R.H. Sciaroni	R. Miskus	
	N.F. McCalley		

Toxicant not indicated	L. D. Anderson R. L. Metcalf	F. A. Gunther T. R. Fukuto	Calif. (Riverside) " "
"	G. C. Decker Norman Cannon	John Matteson John Merboth	Illinois "

MISCELLANEOUS CROPS OR PRODUCTS

Toxicant	Entomologist Plant Pathologist etc.	Analyst	State
<u>HOPS</u>			
Fungicides	- -	L. C. Terriere	Oregon
<u>MUSHROOMS</u>			
Fungicides	H. C. Frick	D.E.H. Frear	Pennsylvania
<u>PEPPERMINT</u>			
Fungicides	- -	L. C. Terriere	Oregon
<u>PINEAPPLES</u>			
Endrin	M.E. Perez	J. A. Bonnet	Puerto Rico

SOIL PESTICIDES

Toxicant	Entomologist Plant Pathologist etc.	Analyst	State
Aldrin	G. C. Decker	N. Cannon	Illinois
"	J. M. Kulash	T. G. Bowery	North Carolina
"	"	E. P. Lichtenstein	Wisconsin
"	J. M. Dewey	M. H. J. Weiden	N. Y. (Cornell)
"	"	A. W. Avens	N. Y. (Geneva)
Amino Triazole	M. Schrieber	D. J. Lisk	N. Y. (Cornell)
BHC (Peaches)	W. D. Wylie	- -	Arkansas
" (Alfalfa)	C. R. Weaver	- -	Ohio
Chlordane (Peaches)	W. D. Wylie	- -	Arkansas
C. M. U. (Asparagus)	E. M. Rahn	C. W. Woodmansee	Delaware
DDT	G. C. Decker	N. Cannon	Illinois
DDT (Cotton)	C. H. Thomas	H. J. Webb	South Carolina
Dieldrin (Peaches)	W. D. Wylie	- -	Arkansas
"	G. C. Decker	N. Cannon	Illinois
"	C. W. Mingo	- -	Missouri
"	- -	A. W. Avens	N. Y. (Geneva)
"	- -	E. P. Lichtenstein	Wisconsin
"	J. M. Dewey	M. H. J. Weiden	N. Y. (Cornell)
Heptachlor	G. C. Decker	N. Cannon	Illinois
"	C. W. Mingo	- -	Missouri
"	- -	A. W. Avens	N. Y. (Geneva)
"	J. M. Kulash	T. G. Bowery	North Carolina
"	J. M. Dewey	M. H. J. Weiden	N. Y. (Cornell)
Lindane	- -	E. P. Lichtenstein	Wisconsin
Methoxychlor (Peaches)	W. D. Wylie	- -	Arkansas
Parathion (Peaches)	W. D. Wylie	- -	Arkansas
Toxaphene	G. C. Decker	N. Cannon	Illinois
General	J. H. Lilly	J. E. Fahy (USDA)	Iowa
Toxicant not indicated	G. C. Decker	John Matteson	Illinois
	Norman Gannon	John Berboth	Illinois



